



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/755,049

01/08/2004

Juergen Otten

4604

8705

21553

7590

07/26/2006

FASSE PATENT ATTORNEYS, P.A.
P.O. BOX 726
HAMPDEN, ME 04444-0726

EXAMINER

TALBOT, MICHAEL

ART UNIT

PAPER NUMBER

3722

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/755,049

Applicant(s)

OTTEN, JUERGEN

Examiner

Michael W. Talbot

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 08 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-10 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,5,7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver '956 in view of Mackey, Sr. et al. '992. Silver '956 shows in Figures 1-3 a clamping mechanism comprising a clamping bail (1) forming a clamping opening, a first clamping section (3) aligned with a second clamping section (2) facing each other across the clamping opening. Silver '956 shows the first clamping section further comprising a drill bushing guide element (5,13,14) with a hollow guide channel (18) adapted to guide a drill bit (26) driven by a drilling tool (Fig. 1) and a removable centering pin (17) axially movable within guide element for positioning a correct drilling position (col. 3, lines 27-38). Silver '956 shows the second clamping section further comprising a pressure member (8) and a clamping drive comprising a clamping screw (4) and a handle (6) rotatably mounted wherein the guide element is an adapter (13,14) in axial alignment with guide element for holding a drill in alignment. Silver '956 shows in Figure 3 a cavity (v-notch) in the pressure member where the drill bit tip can enter when a hole drilling is completed.

Silver '956 lacks the adapter being secured to the first clamping section and comprising a locking device for securely locking said drilling tool to the first clamping section.

Mackey, Sr. et al. '992 shows in Figures 2,5 and 6 a clamping mechanism (50) comprising an adapter (8,10,26,30,32) being securable (via retaining screw 44) to the first clamping section (upper jaw 53 as viewed in Fig. 2) and comprising a locking device (via shank

Art Unit: 3722

8, adapter chuck 10 and drive connector 12) for securely locking (in a rotational direction) the drilling tool (attached to chuck 4) to the first clamping section. In view of this teaching of Mackey, Sr. et al. '992, it is considered to have been obvious to one of ordinary skill in the art to replace the drill assembly of Silver '956 with the drill assembly taught by Mackey, Sr. et al. '992 in Figs. 5 and 6 to provide a secured clamping mechanism arrangement for a drill to limit insertion/withdrawal of the drill bit from the guide element (and clamping mechanism) thus reducing wear of both components and improving reproducibility and accuracy of the operation (col. 1, lines 15-23).

3. Claims 6,8,9,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver '956 in view of Mackey, Sr. et al. '992, further in view of GB 2288356. Silver '956 in view of Mackey, Sr. et al. '992 lacks the clamping drive being comprised of a cam and drive lever for securely clamping the work piece.

GB 2288356 shows in Figures 1 and 3 a clamping mechanism having a clamping drive comprising a clamping screw (4 and 21 respectively) with a dead end cavity (21 in Figure 3) in axial alignment with guide (6,7) to provide a relief bore (page 6, 6th paragraph) for drill bit and alternative clamping configurations/designs using a screw, spring, cam, lever, hydraulic, electric, pneumatic or any other method to apply a clamping force (page 4, 4th paragraph). In view of this teaching of GB 2288356, it is considered to have been obvious to one of ordinary skill in the art to choose another well-known clamping drive mechanism (cam action and lever) to provide a means for quickly and securely clamping and releasing the work piece without potential thread slippage.

4. Silver '956 in view of Mackey, Sr. et al. '992 lacks the clamping drive being comprised of a clamping push rod slidably and rotatably mounted and a lever for securely clamping the work piece. GB 2288356 shows in Figures 1 and 3 a clamping mechanism having a clamping drive

Art Unit: 3722

comprising a clamping screw (4 and 21 respectively) and alternative clamping configurations/designs using a screw, spring, cam, lever, hydraulic, electric, pneumatic or any other method to apply a clamping force (page 4, 4th paragraph). In view of this teaching of GB 2288356, it is considered to have been obvious to one of ordinary skill in the art to choose another well-known clamping drive mechanism (clamping push rod and lever) to provide a means for quickly and securely clamping and releasing the work piece without potential thread slippage.

5. Silver '956 in view of Mackey, Sr. et al. '992 lacks the clamping drive being comprised of a piston cylinder and a piston for securely clamping the work piece. GB 2288356 shows in Figures 1 and 3 a clamping mechanism having a clamping drive comprising a clamping screw (4 and 21 respectively) and alternative clamping configurations/designs using a screw, spring, cam, lever, hydraulic, electric, pneumatic or any other method to apply a clamping force (page 4, 4th paragraph). In view of this teaching of GB 2288356, it is considered to have been obvious to one of ordinary skill in the art to choose another well-known clamping drive mechanism (piston cylinder and piston) to provide a means for quickly and securely clamping and releasing the work piece without potential thread slippage.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silver '956 in view of Mackey, Sr. et al. '992, further in view of Sarh '022. Silver '956 in view of Mackey, Sr. et al. '992 lack the clamping mechanism comprising a suction type device in communication with the guide element for extracting drill chips.

Sarh '022 shows in Figure 6 a suction type device (100) in communication with the guide element for extracting drill chips via suction/vacuum pressure (102). In view of this teaching of Sarh '022, it is considered to have been obvious to modify the clamping mechanism of Silver '956 in view of Mackey, Sr. et al. '992 with a vacuum device of Sarh '022 to prevent the drill

Art Unit: 3722

chips from clogging-up the drilling area and binding the drill bit thus eliminating excess frictional wear and tear of the drill bit from heat build-up thus resulting in an increase drilling efficiency and drill bit life.

Response to Arguments

7. Applicant's arguments filed 08 May 2006 have been fully considered but they are not persuasive.

8. Examiner respectfully disagrees with Applicant's argument that the above references do not teach that the guide element and the adapter are one in the same and is adapted to perform the three functions of (1) guide a drill bit, (2) guide a centering pin, and (3) lock the drilling tool to the first clamping section.

Silver '956 clearly shows the "guide element" (5,13,14) being one in the same as an adapter and is clearly adapted (via hollow guide channel 18) to guide a drill bit (26) and guide a centering pin (17).

Mackey, Sr. et al. '992 clearly shows the identical structure of the adapter (8,10,26,30,32) being secured to a clamping section (via retaining screw 44) and comprising a locking device (via shank 8, adapter chuck 10 and drive connector 12) for securely locking (in a rotational direction) the drilling tool (attached to chuck 4) to the first clamping section.

9. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the feature upon which applicant relies (i.e., drill bit is not removable) found on page 9 of Applicant's argument is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Art Unit: 3722

Furthermore, Examiner respectfully disagrees with Applicant's argument that this construction expressly excludes the possibility of providing a removable centering pin. The centering pin as taught by Silver '956 has no "shoulders" and therefore is clearly removable within any guide element with an aperture larger than the diameter of the pin.

10. Examiner respectfully disagrees with Applicant's argument that the locking device is not secured relative to the adapter since it is freely removable. Mackey, Sr. et al. '992 clearly shows the locking device (via shank 8, adapter chuck 10 and drive connector 12) for securely locking in a rotational direction (as no direction has been claimed so the broadest reasonable interpretation is applied to mean in any direction) the drilling tool (attached to chuck 4) to the first clamping section.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's

Art Unit: 3722

office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mrs. Monica S. Carter, may be reached at 571-272-4475.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.



MWT
Examiner
20 July 2006



MONICA CARTER
SUPERVISORY PATENT EXAMINER